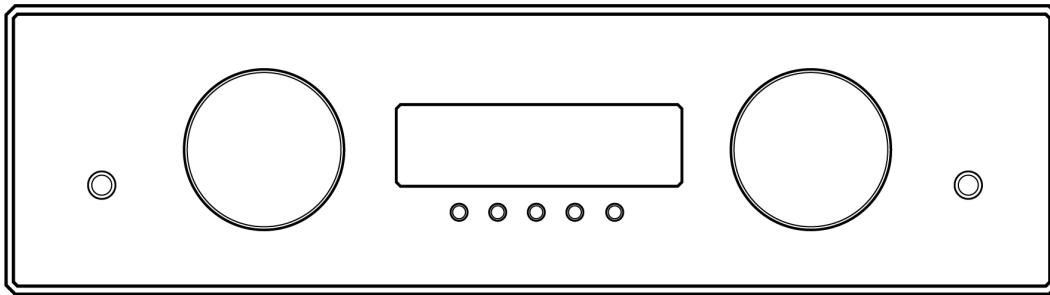


OVATION PA 8.2

Operating Instructions



Declaration of conformity (for EC only)

We herewith confirm, that the unit to which this manual belongs fulfills the EC rules necessary to obtain the sign



the necessary measurements were taken with positive results.

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CHAPTER

1

Getting started

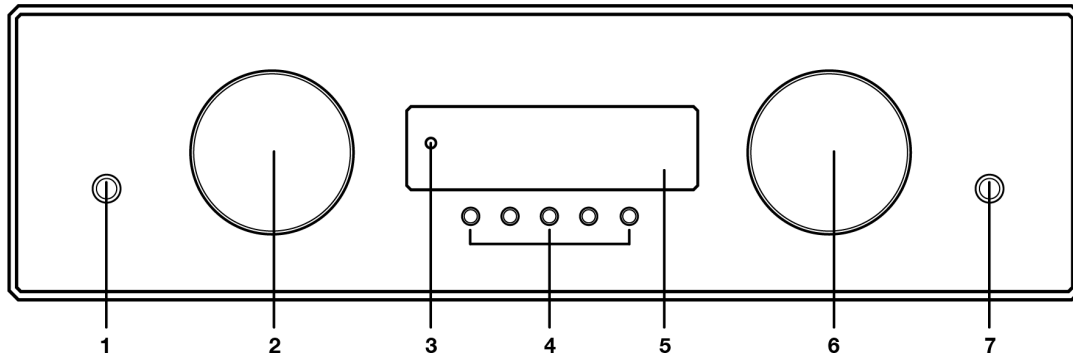
1.1 What's in the box?

- PA 8. 2 Preamplifier
- Power cord (in some countries)
- RC 3 remote control

After unpacking, please check the scope of delivery to ensure that all parts have been supplied and are undamaged. In case the original packing has already been opened, please contact your local dealer. Often, your dealer prepares your new device prior to delivery to adapt and change the configuration to your personal needs.

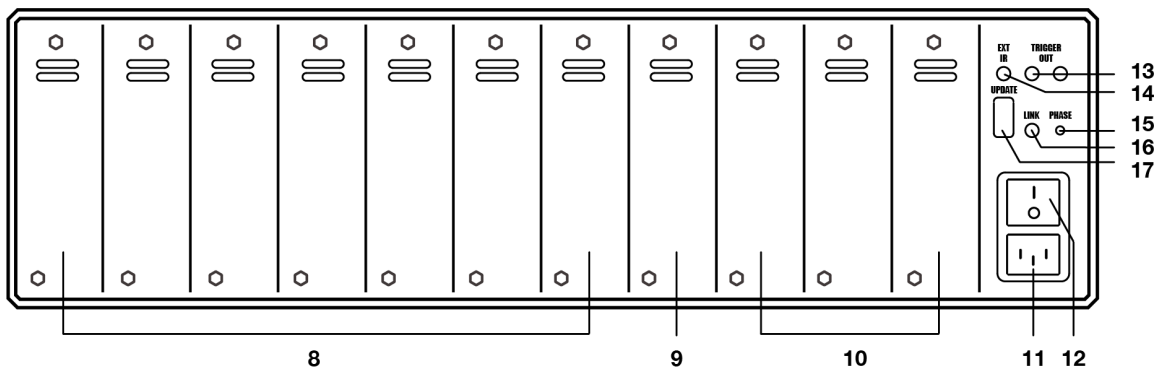
1.2 Control and operating elements

1.2.1 Front



1. Power button (on/off)
2. Source selector
3. Control LED
4. Menu buttons
5. Display
6. Volume knob
7. Headphone output (6,35mm)

1.2.2 Back plate

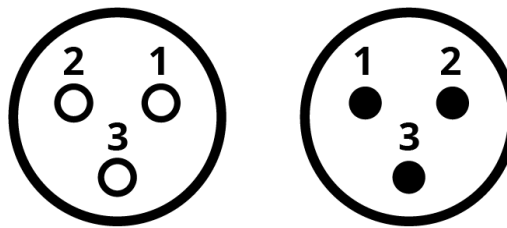


CAUTION

Please use only Slot 8 to install the **INPUT TONE** card (9). The Slots 1-7 may be allocated with all other input cards: **INPUT, TUNER, PHONO MM/MC, DIGITAL IN** (8).

8. Slot 1-7 for all input cards (except INPUT TONE)
9. Slot 8 only for INPUT TONE card
10. Slot 9-11 for all output cards
11. Mains connector
12. Mains switch
13. Trigger outputs (TRIGGER OUT)
14. Input for external IR receiver (EXT IR)
15. Phase LED
16. Link-Port
17. Configuration port (Firmware)

1.2.3 Pin assignment: XLR

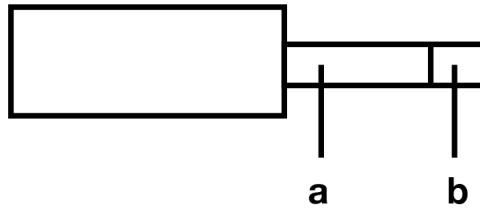


XLR input (left)

XLR output (right)

1. Ground (GND)
2. Non-inverting input/output POS (+)
3. Inverting input/output NEG (-)

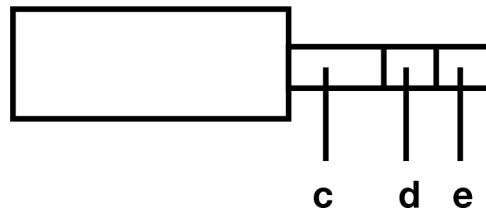
1.2.4 Pin assignment: Trigger outputs



Pin assignment of the 3,5mm jack output for external trigger signals(13)

- a) Ground (GND)
- b) Trigger signal (+5V)

1.2.5 Pin assignment: Input for external IR receiver



Pin assignment of 3,5mm stereo jack input for external IR receiver (14)

- c) Ground (GND)
- d) IR signal
- e) +5V

1.2.6 Assembly of input and output cards

CAUTION

Please make sure the mains plug is removed before you open the unit. Plug-in cards may never be installed or removed while the unit is powered on. In case of any doubt, please consult your local dealer to assist you with the assembly of input and output cards.

NOTE

Keep the unit switched off until all audio connections are made.

At the back of the PA 8.2, there is a total of 11 slots which may be allocated with optionally available input and output cards (slot-in modules). These slots are counted from the left to the right (see section "*Back plate*" on page 2). Existing plug-in cards can be in almost any order. Unused slots come with a blanking plate covered.

The nature of all plug-in cards is identical (width of the cover plate, position of the plug). Nevertheless, to ensure correct operation of the PA 8.2, some placement rules must be observed:

1. Input cards can be placed in any order to the slots 1-7 (8).
2. The INPUT TONE card with integrated sound control may exclusively be installed in slot 8 (9).
3. Output cards are installed in slots 9-11 (10).

Please note: Each time the device is powered on with the power switch on the rear side (12), the unit goes through a **hardware test** and verifies the configuration and functionality of the input and output cards used. The current status of the test is shown on the display (5). If the module is placed incorrectly or in the wrong position (e.g. input module in the position of an output module), the hardware test will be aborted and an error message is displayed.

1.2.7 Connection of sound sources

Analog and digital sources are connected to the inputs of the installed input cards of the PA 8.2. The left channel is connected to the white marked RCA input, the right one channel at the red marked. At the XLR inputs, the upper port is intended for the left channel (L), the lower one for the right channel (R).

1.2.8 Connection of power amplifiers

NOTE

Make sure when connecting XLR cables that correct wiring of the XLR plug is used (see section "[Pin assignment: XLR](#)" on page 3).

Use suitable cables to connect your power amplifier(s) to the connectors of the installed output cards in the slots 9-11 (see section "[Back plate](#)" on page 2).

The left channel transitions to the white marked RCA, the right channel to the red marked RCA.

For the XLR outputs, the upper port is for the left channel (L), the lower connection for the right channel (R).

1.2.9 Remote activation of power amplifiers

1.2.9.1 Remote activation of power amplifiers with analog trigger input

If your amplifier is equipped with a trigger input, the PA 8.2 can remotely turn it on. To do this, connect one of the two trigger outputs of the PA 8.2 (13)

with a trigger input of your amplifier. For a correct pin assignment, please refer section, see section "[Pin assignment: Trigger outputs](#)" on page 4.

1.2.9.2 Remote activation of latest generation AVM amplifiers

If you have an AVM amplifier of the latest generation connected (EVOLUTION MA 3.2, SA 3.2, OVATION MA 6/8.2, SA 6/8.2), it will automatically turned on, provided the respective mode is activated at your AVM amplifier. A connection of a separate trigger cable (see section "[Remote activation of power amplifiers with analog trigger input](#)" on page 6) is not required in this case.

1.2.10 Connection of headphones

HINWEIS

Please note that all output signals (10) are muted as long as the headphone output (7) is connected.

Through the headphone output on the front of the unit (7), headphones with a 6,35 mm jack plug may be connected. The volume of the headphone output signal is regulated with the volume control (6).

Basic operation

2.1 First operation / self test

CAUTION

If the device is too cold, condensation water can form inside the unit. This may damage the unit if it is switched on too early. Therefore, allow the PA 8.2 to stand in the listening room for at least one hour before switching it on so that it can adapt to the current room temperature.

First, press the power switch on the rear panel (12) and a hardware test will be performed. The device checks the configuration and functionality of the input and output cards used. The current status of the hardware test is shown in the display (5). If a module is not inserted properly or in the wrong position (for example, input module in the position of an output module), the hardware test is aborted and a corresponding error message appears. Upon successful completion of the hardware test, the device enters standby mode.

The on / off button (1) allows you to switch between operation and standby mode. In standby mode, the display is dark and the control LED (3) is lit. As soon as the device is in operation, the control LED goes out and the display is activated.

Please note: The device is not entirely disconnected in standby mode. To disconnect completely, press the mains switch on the rear panel (12) or disconnect the power cable from the mains connector (11).

2.1.0.1 Phase LED

A glowing phase LED on the back (15) indicates an incorrect phase. Therefore, make sure the phase LED does not light up after switching on the device for the first time. Otherwise change the phase position, e.g. by turning the mains plug to the power socket.

2.1.0.2 Tube warm-up

If an optional **TUBE OUT** card is installed, the switch-on process will take about 30 seconds due to the required tube warm-up time. Please wait until the entire display **waiting for tube warmup** changes completely from lower case to uppercase and then goes out. The device is now ready for use.

Without a **TUBE OUT** card installed, the switch-on process takes approx. five seconds. The display shows a corresponding countdown during this time.

2.2 Selecting a sound source

NOTE

Input names of sound sources can be adjusted as desired via the **personal setup** menu (see section "[Personal Setup](#)" on page 29).

To select a sound source, turn the source selector (2). The selected program source is shown in large letters on the display (5) - e.g. RCA, XLR, USB, OPTO or COAX. An exception is the TUNER input card: Here, e.g. the frequency RDS name of the currently selected station is displayed in large letters instead (see section "[Set RDS display](#)" on page 20).

2.3 Volume setting

To adjust the volume, use the right-hand rotary control (6). The current volume value is displayed numerically (0 to 99.5 dB) in large letters in the display (5).

The step size of the volume change depends on the rotation speed. Slow rotation causes a level change in steps of 0.5 dB, fast turning changes the volume in 2 dB steps.

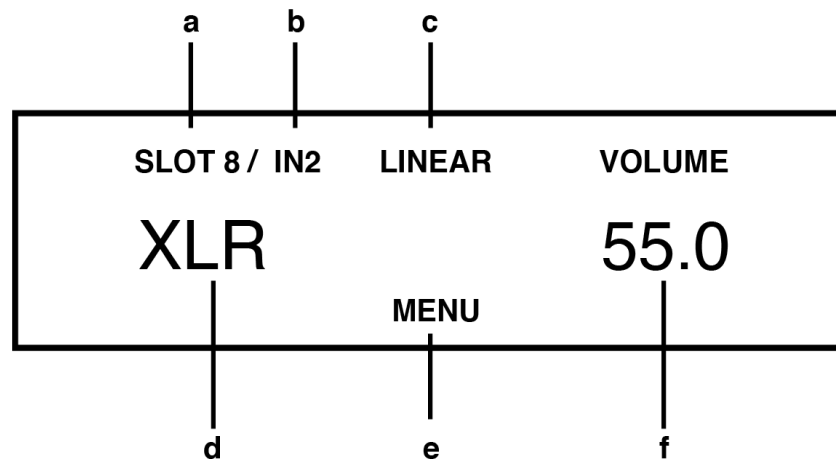
Please note: If an optional digital input is selected and there is no valid digital signal, the display will show **NO DIG SIGNAL** instead of a volume value. In this state, adjusting the volume is not possible.

2.4 Analog inputs

NOTE

To use an analog input, it is necessary to install an optional input card (**INPUT** or **INPUT TONE**) (see section "[Assembly of input and output cards](#)" on page 5).

To select an available analogue input, press the source selector switch (2) until the desired input name is shown on the display in large letters (d). Additional sound settings are available by pressing the MENU (e) button (see section "[Sound settings](#)" on page 23).



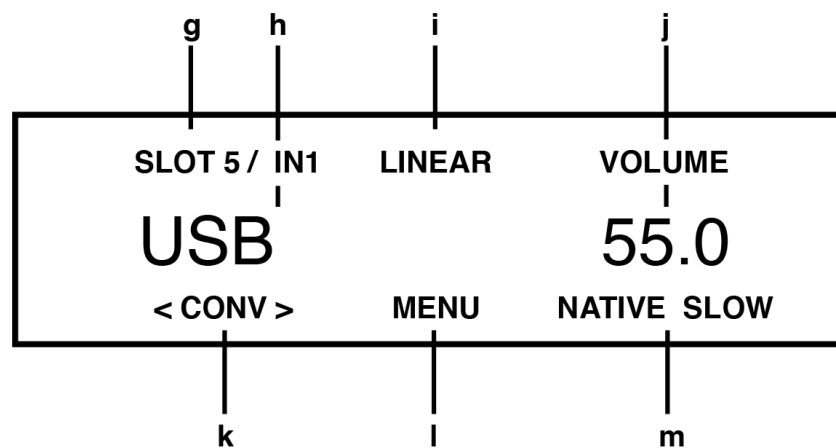
- a) **SLOT**: Indicates the selected slot of an input card (slot 1-8).
- b) **IN**: Numeric display of the selected input on a card, e.g. **1** for **RCA**, **2** for **XLR**. The name of the selected input is shown in large letters below.
- c) **LINEAR**: Sound control is deactivated.
TONE: Sound control is activated.
(see section "[Sound settings](#)" on page 23).
- d) Name of the selected input. This can be adjusted as needed (see section "[Define input names](#)" on page 31).
- e) **MENU** button to select the sound settings (see section "[Sound settings](#)" on page 23).
- f) **VOLUME**: Volume indicator (see section "[Volume setting](#)" on page 10).

2.5 Digital Inputs

NOTE

To use a digital input, the installation of an optional input card (**DIGITAL IN**) is required (see section "[Assembly of input and output cards](#)" on page 5).

To select an available digital input, turn the source selector (2) until the desired input name is shown on the display in large letters (h). Additional sound settings are available by pressing the **MENU** (l) button (see section "[Sound settings](#)" on page 23).



- g) **SLOT**: Indicates the selected slot of an input card (slot 1-8).
- h) **IN**: Numeric display of the selected input on a card, e.g. 1 for **USB**, 2 for **OPTO**, 3 for **COAX 1**, 4 for **COAX 2**. The name of the selected input is shown in capital letters below and can be adjusted as required (see section "[Define input names](#)" on page 31).
- i) **LINEAR**: Sound control is deactivated.
STONE: Sound control is activated.
- j) **VOLUME**: Volume indicator (see section "[Volume setting](#)" on page 10).
- k) **CONV** Menu buttons for selecting the sample rate and the filter setting (m) - see section "[Samplerate and Filter settings](#)" on page 13.

- l) **MENU** button to select the sound settings (see section "*Sound settings*" on page 23)
PLEASE NOTE: MENU only displayed if a valid signal is applied to the selected digital input.
- m) Display of the current sample rate (**NATIVE** or **CNV**) and the filter setting (**FAST** or **SLOW**) - see section "*Samplerate and Filter settings*" on page 13.

2.5.1 Samplerate and Filter settings

NOTE

For **USB**, only the two options **NATIVE FAST** and **NATIVE SLOW** are available.

By pressing the two menu buttons **CONV** (k) once or several times, you can choose between available sample rates and filter settings for the selected digital input. The setting is saved for each individual input until the next manual change.

NATIVE indicates that the sample rate of the applied signal is processed directly. **CNV** stands for 'conversion' and means that it upsamples or down-samples to the desired and displayed sample rate.

The filter settings **FAST** and **SLOW** can be selected according to your tonal preferences. Depending on the signal played back, different filter settings can produce the most preferable sound.

Technically speaking, **FAST** means steep filtering at the band end with a flat amplitude response, but with strong phase rotation. By contrast, **SLOW** filters less steeply and already has a small amplitude drop before the end of the frequency band, but a lower phase shift. The selected filter setting only applies to the current input and remains stored even after the device has been switched off. It can be changed at any time by pressing the menu buttons **CONV** (k) again.

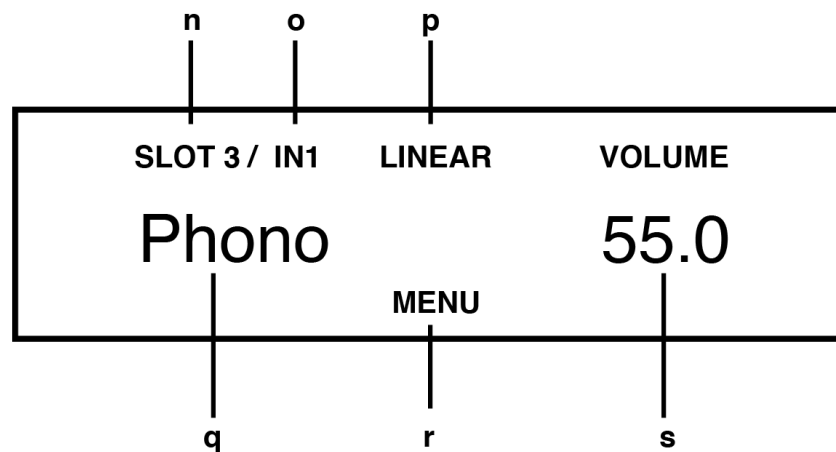
2.6 Phono Input

NOTE

To use a phono input, an optionally available phono input card (**PHONO MM / MC**) is required (see section "[Assembly of input and output cards](#)" on page 5).

To select an available phono input, turn the source selector (2) until the desired input name is shown on the display in large letters (q). Setting options (**MM / MC, phono gain, subsonic filter**, etc.) are available by pressing the MENU button (see section "[Phono Settings](#)" on page 15). For more options, see section "[Sound settings](#)" on page 23.

All settings made for the phono card take effect immediately. This way, different options may be compared in real time while a record is playing.



- n) **SLOT**: Indicates the selected slot of an input card (slot 1-8).
- o) **IN**: Numeric display of the selected input on a card (in case of the phono card, only one input

is available). The name of the selected input is shown in large letters below.

- p) **LINEAR**: Sound control is deactivated.
TONE: Sound control is activated.
- q) Name of the selected input. This can be adjusted as needed (see section "[Define input names](#)" on page 31).
- r) **MENU** Button to access the phono settings (see section "[Phono Settings](#)" on page 15) and sound settings (see section "[Sound settings](#)" on page 23).
- s) **VOLUME**: Volume indicator (see section "[Volume setting](#)" on page 10).

2.7 Phono Settings

A short press on the **MENU** button takes you to the **Phono Settings** menu. The label of the same menu key now changes to **EXIT**. Press the button again to exit the menu and return to the normal operating state.

Individual menu items may be selected with the <**ITEM**> keys. The selected menu item is always displayed in the upper area of the display. Use the <**VALUE**> keys to change the value of the selected menu item. The settings made take effect immediately. This way, you may immediately control respective adjustments while a record is playing.

Please note: Besides the phono settings explained below, you will find further sound settings in the same menu (see section "[Sound settings](#)" on page 23).

2.7.1 Set phono mode (MM/MC)

Depending on the construction principle of the pickup system, use **MM** for electromagnetic transducers (MM = Moving Magnet), or select **MC** for electrodynamic transducers (MC = Moving Coil). Please refer to the corresponding documentation of your pickup system to find out whether it works according to the MM or MC principle.

Please note: In case the output level of your **MC** system is high enough, the **MM** setting can also be used. For further information, please refer to the operating instructions of your turntable or pickup.

2.7.2 Set phono gain

Use the **set phono gain** function to adjust the gain to match the pickup you are using. Depending on the output voltage of the system, a setting between 43 dB and 52 dB (with MM setting) or 63 dB and 72 dB (MC setting) may be selected.

Please note: Even with a 'wrong' setting, your phono card will not be damaged. If the gain is too high, however, an audible overload by the pickup is possible. Please make sure to reduce the gain in this case.

2.7.3 Set subsonic filter

The function **set subsonic filter** offers you an optional subsonic filter to reduce audible rumble noise in

the lowest bass range. Activation is especially advisable for corrugated records or unfavorable installations of the turntable (structure-borne sound).

2.7.4 Set MM capacitance

For a perfect sound experience, the **set capacitance** feature provides the ability to customize the connection capacity for MM systems.

Please note: The total capacity consists of the displayed value plus the capacity of the supply cable (rule of thumb: 100pF per meter). For optimum capacity refer to the instructions of your turntable / pickup.

2.7.5 Set MC resistance

NOTE

The menu item is only displayed if the phono mode is set to 'MC' (see section "[Set phono mode \(MM/MC\)](#)" on page 16).

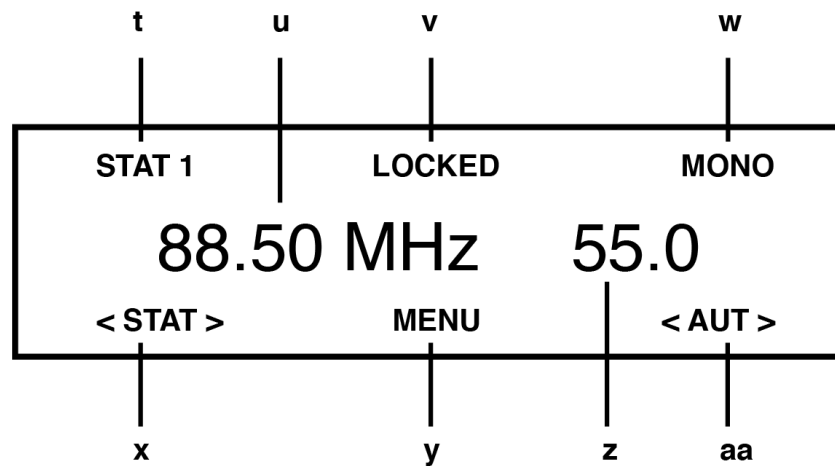
The **set MC resistance** function adjusts the load impedance for MC systems. Please refer to the instructions of your turntable / pickup for instructions on the optimum load impedance.

2.8 FM-Tuner

NOTE

To use the FM tuner it is necessary to install an optional input card (**TUNER**) (see section "[Assembly of input and output cards](#)" on page 5).

After selecting the **FM Tuner** with the source selector (2), you may operate all functions with the menu buttons (4) below the display. Further setting options (**RDS**, **search mode**, etc.) are available via the **FM Tuner Settings** menu (see section "[FM Tuner Settings](#)" on page 20) and the menu **Advanced FM Tuner Settings** (see section "[Advanced FM Tuner Settings](#)" on page 22).



- t) **STAT**: Displays a station memory location (see section "[Storing new stations](#)" on page 19).
- u) Display of station frequency or **RDS** name (see section "[Set RDS display](#)" on page 20).
- v) **LOCKED** indicates an identified station. When the **RDS NAME** is activated, the station frequency is displayed here instead (see section "[Set RDS display](#)" on page 20).
- w) Indicates whether a station is being received in **MONO** or **STEREO**.
- x) **STAT**: Menu buttons for recalling stored stations (see section "[Recalling stored stations](#)" on page 20).

- y) **MENU** Button to access **FM Tuner Settings** (see section "*FM Tuner Settings*" on page 20) and **Advanced FM Tuner Settings** (see section "*Advanced FM Tuner Settings*" on page 22).
- z) **VOLUME**: Volume indicator (see section "*Volume setting*" on page 10).
- aa) **AUT / MAN**: Buttons for automatic or manual tuning (see section "*Tuning*" on page 19).

2.8.1 Tuning

Depending on whether the scan mode has been set to manual or automatic (see section "*Set scan mode*" on page 21), the right buttons below the display are labeled **AUT** or **MAN**. When set to **AUT**, pressing these buttons enables an automated search process to identify the next higher or lower station (in terms of frequency). When set to **MAN**, a manual button press changes the receive frequency by 50 kHz. If pressed for a longer time, the frequency will automatically move up or down in 50 Hz increments.

2.8.2 Storing new stations

You have the option to save a currently selected station, to move an already stored station, to save it with changed settings or to delete it. The device also offers a convenient **autostore** function (see section "*Set scan mode*" on page 21).

2.8.3 Recalling stored stations

Use the two buttons **STAT** (e) to select stored stations. Short tap switches to the next higher / next lower memory location. Keep one of the buttons pressed to switch to automatically the next station. The number of the currently selected memory location is shown in the upper left corner of the display (see **t** in the figure above).

2.9 FM Tuner Settings

NOTE

The **FM Tuner Settings** menu is only available if a **TUNER** input card is installed (see section "[Assembly of input and output cards](#)" on page 5) and selected as the current sound source.

A short press on the **MENU** button takes you to the **FM Tuner Settings** menu. The key label of the same menu key now changes to **EXIT**. Press the button again to exit the menu and return to the normal operating state. Individual menu items can be selected with the **<ITEM>** keys. The selected menu item is always displayed in the upper area of the display. Use the **<VALUE>** keys to change the value of the selected menu item.

Please note: After calling up the **FM Tuner Settings** options explained below, you will find additional sound settings in the same menu (see section "[Sound settings](#)" on page 23).

2.9.1 Set RDS display

RDS stands for '**Radio Data System**' and allows the transmission and indication of additional information of the selected radio station on the display (5).

The **set RDS display** function allows you to select a frequency (**FREQUENCY**) or station name (**NAME**).

2.9.2 Set scan mode

Use the **set scan mode** function to set the desired scan mode: **AUTO** automatically searches for the next station after pressing one of the two right-hand menu buttons, whereas **MANUAL** allows manual tuning (see section "*Tuning*" on page 19).

2.9.3 Set 2 channel mode

For an optimal and noise-free sound quality of the tuner, the **2 channel mode** option offers you a choice between **MONO** and **STEREO**. Depending on the selected setting, the tuning threshold of the tuner changes during automatic tuning: In the **STEREO** setting, only stations with strong transmission power are identified - in the **MONO** setting, also stations with weaker transmission power.

2.9.4 Set deemphasis

Choosing a correct deemphasis value will improve the sound quality of the FM tuner by optimizing the signal-to-noise ratio and transmitting the entire frequency range as consistently as possible. If you do not operate your device in the USA, please select the option **EUR, AUS, JPN** with a time constant of **50** (μs). In the USA, however, a time constant of **75** (μs) is recommended.

2.10 Advanced FM Tuner Settings

A long press on the **MENU** button takes you to the **Advanced FM Tuner Settings** menu. The key label of the same menu key now changes to **EXIT**. Press the button again to exit the menu and return to the normal operating state.

2.10.1 Storing and managing radio stations

2.10.1.1 Store new station

To store new stations, an unused preset number in large letters is proposed on the left side (e.g. if five stations are already stored, the 6th preset number is suggested). Press the **STORE** button to save the station. Once at least one station is stored, you can use the **MOVE** buttons to select a different station memory number. If you have selected an already used station memory number, the set station will be stored there and the previously stored station will be shifted up one number.

2.10.1.2 Change, move, or delete stored stations

An already stored station can be deleted, moved, or saved with changed settings (**mono / stereo, bandwidth, etc.**). First, make the desired changes outside the menu in normal operating condition and press the **MENU** button for more than 2 seconds. If necessary, you can use the **MOVE** buttons to move the position and save the station using the **STORE** button. If you just want to delete the station, press the **DELETE** button.

2.11 Sound settings

Regardless of the selected input card, press the **MENU** button to go to the **Sound settings** menu. The key label of the same menu key now changes to **EXIT**. Press the button again to exit the menu and return to the normal operating state.

Individual menu items may be selected with the **<ITEM>** keys. The selected menu item is always displayed in the upper area of the display. Use the **<VALUE>** keys to change the value of the selected menu item

Please note that for some input cards, specific menu items precede the sound settings described below (for example, **set phono mode** on **PHONO**, etc.).

2.11.1 General sound settings

2.11.1.1 Set balance

The **set balance** function allows you to shift the right-left balance in the range of 9.5 dB left or right to compensate for imbalances.

2.11.2 Sound settings of the TONE IN card

NOTE

The menu options explained below are only available if a **TONE IN** input card with integrated tone control module is installed (see section "[Assembly of input and output cards](#)" on page 5).

2.11.2.1 Set tone control

With the menu item **set tone control** you may activate the sound control electronics which allow the adjustment of bass and treble as well as the selection of different loudness curves. In the **BYPASS** position, the tone control electronics are deactivated (previously made settings are still stored).

In the **ACTIVE** position, the tone control electronics are ready to operate and will be activated as soon as you make a setting under **set bass**, **set treble** or **set loudness**. If a neutral setting (**BASS = 0**, **TREBLE = 0**, **COUNTOUR = OFF**) has been selected, the tone control electronics will remain deactivated even in the **ACTIVE** position until one of the parameters is changed.

In the general operating state, an activated tone control electronics is displayed in the upper area of the display with **TONE ON** - otherwise **LINEAR**.

Bass and treble can be raised or lowered together for all inputs (**GLOBAL**) or specifically for the currently selected input (**INDIVIDUAL**). If an individual setting is required, the inputs must first be parameterized via the **Personal Setup** (see section "[Personal Setup](#)" on page 29). This is useful, for example, to compensate for a bass weakness of the turntable, without the bass is raised at another input source.

The setting of the loudness function (**set loudness**) is dependent on the loudspeaker and the room and therefore generally valid for all inputs globally.

Please note: As soon as the tone control electronics under **set tone control** is set to **BYPASS**, the other menu items **set bass**, **set treble** and **set loudness** will be hidden.

2.11.2.2 Set bass

With the menu item **set bass** you can adjust the bass reproduction from -7 to +7 dB. When a global setting for all sound sources is selected, **GLOBAL** is displayed in the upper right corner of the display, **INDIVIDUAL** if set individually.

2.11.2.3 Set treble

The menu item **set treble** may be used to set the high-frequency reproduction from -7 to +7 dB. When a global setting for all sound sources is selected, **GLOBAL** is displayed in the upper right corner of the display, **INDIVIDUAL** if set individually.

2.11.2.4 set loudness

Soft listening to music often gives the impression of a flat, unbrilliant sound. This is due to a characteristic of the human ear: with quiet noises and sounds, low bass and treble signals are not as well perceived as when listening to louder volume levels.

The option **set loudness** raises bass and treble signals while listening to soft volume levels and gradually decreases the effect to a linear frequency response when the volume level is raised.

Select a sound source and set a moderate listening volume. Then switch to the menu **set loudness**. Under **CONTOUR**, use the menu buttons **<VALUE>** to select one of the 9 available loudness correction curves until the sound appears balanced and pleasant. As soon as you exit the menu (menu button **EXIT**), the selected setting remains stored. Any change in the volume setting will now cause an adjustment of the bass and treble levels.

Please note: When the **set loudness** menu is called up again, the displayed value may differ from the originally selected setting. This is not a mistake, but due to the fact that the sound engine unit selects an adapted correction curve depending on the currently set volume level. The current curve is then displayed accordingly when the **set loudness** menu is selected.

2.11.3 Input sensitivity (Level Adjustment)

CAUTION

The menu for **level adjustment of digital inputs** is only available if a compatible digital signal is present at a respective input.

Often, the sound sources of a hifi system have different volume levels. Switching the available inputs may result in an unpleasant volume jump that can be prevented by adjusting the input sensitivity of the available input sources.

Use the source selector (2) to select an existing input and set the monitoring volume to a comfortable level with the volume control (6). By switching to another input, check if the levels are approximately identical. If you notice a major deviation, press and hold the **MENU** button for two seconds. On the right side of the display below **level**, the current sensitivity value of the selected input is displayed.

By switching between sources with the source selector (2), you may compare the set levels and adjust the sensitivity of all inputs with the volume control (6) in a range of -9.5 to +10 dB.

NOTE

Please note that the RC 3 remote control is disabled during the level adjustment process.

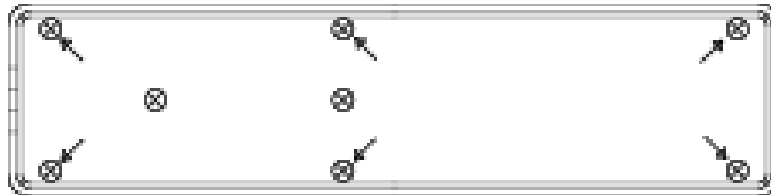
Once all desired levels have been adjusted, press the center menu button **EXIT LVL**. The set sensitivity values are saved and the device changes to the general operating state.

Please note that the menu is also available for adjusting the level of the **FM Tuner**, but may not be selected by a long press on the menu button. Instead, select another existing input in normal operating mode, then press and hold the **MENU** button for two seconds, then use the source selector (2) to switch to **FM Tuner** to adjust the sensitivity value with the volume control (6). Once the desired level of the **FM Tuner** is set, press the center menu button **EXIT LVL**. The set sensitivity value is saved and the device changes to the general operating state.

2.12 Remote Control

The PA 8.2 comes standard with the RC 3 remote control. The following functions can be controlled with the RC 3 remote control: Turning the device on and off (**ON**, **OFF**), volume adjustment (<**VOLUME**>), source selection (<**INPUT**>).

2.12.1 Battery replacement



CAUTION

The two middle screws without arrow marking must not be loosened to change the battery!

As soon as the range of the remote control decreases significantly, the batteries must be replaced. Remove the screws marked on the bottom with six arrows. Now turn the remote control over and remove the bottom with the PCB. Now remove the used batteries and replace them with two new ones of the same type (lithium coin cell 3V, type CR2032). When inserting, pay attention to the correct polarity of the batteries (mark "+" upwards), as otherwise the electronics may be damaged.

Appendix

3.1 Personal Setup

The **Personal Setup** menu provides a number of other setting options to customize the device to your personal needs. To enter the **Personal Setup** menu, turn off the power using the power button (1) on the front panel. Now press the menu button on the right under the display (4) and switch the device on again using the on / off button (1). As soon as the display shows ***** personal setup *****, the menu key can be released. In the **Personal Setup** menu, the individual menu items can be selected with the menu keys **<ITEM>** and activated accordingly with the menu key **SELECT**. Then use the menu keys **<VALUE>** to change the value of the selected function. After making the desired settings, press the menu button marked **BACK**. Subsequently, further menu items can be edited. Pressing the **EXIT** menu button will exit the **Personal Setup** menu.

3.1.1 Set display brightness

Set display brightness adjusts the brightness of the display from **25%** (dark) to over **50%**, **75%** to **100%** (very bright).

Please note: The **100%** brightness setting may result in uneven brightness of individual segments of the display due to 'burn-in effects' during long operating periods. Do not leave the device with this setting unnecessarily long. Switch it to standby mode when not in use (for example, overnight).

3.1.2 Bass & treble control

You can use the **bass and treble control** menu item to specify whether bass and treble components should be adjusted via the tone control electronics (see section "[Sound settings](#)" on page 23) for a single sound source (**INDIVIDUAL**) or for all sound sources (**GLOBAL**).

3.1.3 Skip unused inputs

If you do not need all analog or digital inputs of the installed input cards, the unused inputs can be deactivated (**SKIPPED**). When selecting the source with the rotary switch (2), all inputs defined as **SKIPPED** are skipped automatically and can not also be selected via the **UP / DOWN** function of the

remote control. The settings can be undone at any time by recalling the menu item (Input **ACTIVE**).

3.1.4 Define input names

You can use the menu item **define input names** to change the input names of sound sources on the display (5). A name can contain a maximum of 8 characters. Use the menu keys <**ITEM**> to select the desired input. In the left half of the display, the current name of the selected input is displayed, in the right half is the new name. The character just edited is marked with an underscore. Use the menu buttons <**POS**> to set the position of the character to be changed, and the volume control (6) to select the desired character. Once you have completely entered the names, press the **BACK** menu key and the names are saved.

3.1.5 Gain fix / variable

In a surround system, the leveling of all channels, as well as the bass management is done with a specific surround decoder. These settings should not be changed, since otherwise the leveling or bass management of the involved surround channels is out of balance. The PA 8.2 offers a so-called **gain-fix** function for this use case. This allows you to operate the analog inputs **XLR** and **RCA** with a fixed gain.

If the gain-fix function is activated, the signal is reproduced at a fixed gain when this input is selected. In addition, all the sound settings (for example,

BASS, TREBLE, see section "[Sound settings](#)" on page 23) are disabled, regardless of whether you change the volume of the other inputs or their sound settings or balance settings.

The **gain fix** function is also available for the digital inputs **COAX**, **OPT01** and **OPT02**. However, unlike the analog inputs, the sound settings (e.g., **BASS**, **TREBLE**) and balance adjustment are active here. This feature is useful, for example, when a sound source with its own volume control is connected to a corresponding digital input (for example, systems such as Sonos etc.).

3.1.6 FM auto store

HINWEIS

The menu item is only displayed if an optional **TUNER** input card is installed (see section "[Assembly of input and output cards](#)" on page 5).

This function makes it easier for you to save several radio stations through an automatic search and save process. Select the function **auto store** with the menu button **SELECT** and press the menu button **START**. Now the search process starts. Identified radio stations are briefly played and are audible through the speakers. After the search is complete, the number of stations found will be briefly displayed. If desired, you can subsequently organize the stored stations according to your preferences in normal operation, delete unwanted stations, or change and save the settings (mono / stereo etc.) of certain stations (see section "[Storing and managing radio stations](#)" on page 22).

3.2 Reset (Factory Settings)

The Reset menu allows you to restore the device to its original state. Optionally, all settings or only the input names (**NAMES**) or the station memories (**STAT**) can be edited. To enter the reset menu, turn the unit off using the on / off button (1) on the front panel. Now hold down the middle menu button below the display (4) and switch the device on again using the on / off button (1). As soon as the display shows **RESET**, the middle menu key (4) can be released. Select whether you only want to clear the station memory (**STAT**), only the input names (**NAMES**) or whether the device should be completely set to the delivery state (**ALL**).

If you have accidentally selected the Reset menu, you can leave it at any time by pressing the **CANCEL** menu key without making any changes.

After a reset operation, the device must be completely switched off via the mains switch on the back (12) and switched on again for further operation after a short waiting time of approx. 10 seconds.

3.3 Cleaning

The surface of the housing are largely scratch resistant. This can be cleaned with a mild soapy solution or a glass cleaner and a soft duster. **Please note:** When cleaning, makes sure to prevent liquid to get inside the housing. The power cord should also be unplugged before wiping for safety reasons. Do not use solvents or abrasives that could damage the surface of the housing.

3.4 Troubleshooting

Often, alleged defects can be attributed to accidental operating errors. Occasionally, other components connected to the device may be responsible for malfunction. Therefore, before contacting your dealer or us for a defect, we would kindly ask you to exclude the following causes.

3.4.1 No Playback

Accidentally switching to stand-by mode via the remote control. Press the on / off button (1)

If the display is dim and the Power LED (3) is off, the power supply fuse may be faulty. Since this is usually due to a defect in the power supply or the amplifier electronics (due to lightning, for example), please contact your dealer.

3.4.2 Inadvertent switching to stand by

In this case, one of the protection circuits (e.g., overtemperature, short circuit) has responded. Please contact your dealer.

3.4.3 Hum during music playback

Turntable is positioned near an electrical device whose magnetic interference field is scattered in pickups or cables.

Ground loop by antenna amplifier or antenna cabling. Check if the humming stops when you disconnect the antenna cable from the tuner. If this helps, a sheath current filter must always be plugged into the antenna cables of the connected receivers (available from your specialist dealer).

3.4.4 Remote control not working

The batteries or rechargeable batteries of the remote control are empty. Please exchange or recharge them.

There is no direct connection between the remote control and the device, or the distance is too big.

3.4.5 No RDS display

The station is too weak or wrongly tuned - therefore the data can not be decrypted and nothing is displayed. Some stations do not broadcast RDS data.

3.4.6 Input of an installed slot-in module can not be selected

If an input is marked as unused (**SKIPPED**) in the personal setup (see section "*Skip unused inputs*" on page 30), it can not be selected via the remote control or via the source selector.

3.5 Conditions of warranty (EC only)

If despite expectations a defect occurs that cannot be repaired by yourself or your dealer, we undertake the repair of your unit free of charge for up to three years from date of purchase. The warranty covers the costs of material and working time, transport costs are to be borne by the owner.

Provisions for this warranty are:

1. The unit must have been purchased from an authorised dealer. Equipment from other sources will not be repaired, not even at charge.
2. The warranty registration card, together with a copy of the bill of sale, must be received by us within four weeks of the date of purchase.

3. The defect must not have been caused by improper handling or misuse.

4. Return the unit to us only in its original packing. If this is not possible we are entitled to refuse acceptance. We will not assume responsibility for transport damage under any circumstances.

5. A short description of the defect is to be included with the returned unit.

6. In cases of doubt we reserve the right to request a copy of the bill of sale.

We also reserve the right to levy a handling charge for items returned without good or valid reason, or if the unit proves to be not defective.

3.6 Specifications

3.6.1 Base unit

Input sensitivity (Output voltage 1V)

20 mV – 450 mV (adjustable)

Input impedance Line RCA

3,4 k Ω

Input impedance Line XLR

13,6 k Ω

Signal-to-noise ratio (SNR) Semiconductor/Tube Out

>100 dB / >90 dB

THD Semiconductor/Tube Out

<0,001 % / < 0,01 %

Frequency response Semiconductor/Tube Out

<20Hz - >100 kHz / <20 Hz - >30 kHz

3.6.2 Digital Input Card

Samplerate upsampling /downsampling

switchable up to 384 kHz / 32 Bit

Deemphasis

yes, automatically

Input format opt/coax

S/P-DIF, 33 kHz – 96 / 192 kHz / 16 – 24 Bit

USB Input

asynchronous

PCM (without driver)

up to 96 kHz / 24 Bit

PCM (with driver)

up to 384 kHz / 32 Bit

DSD (with driver)

DSD64 (2, 8 MHz), DSD128 (5,6 MHz)

3.6.3 Phono Input Card

Input impedance MM

47 k Ω // 47 - 420 pF (adjustable)

Gain MM

43 dB - 52 dB (adjustable)

Input impedance MM C

47 pF // 47 Ω - 1 k Ω (adjustable)

Gain MC

63 dB - 72 dB (adjustable)

Signal-to-noise ratio MM

(5mV / 1kHz) 79 dB or 84 dB(A)

Signal-to-noise ratio MC

(0,5 mV / 1 kHz) 70dB or 76 dB(A)

Frequency response

< 30 Hz - > 100 kHz

Phono Equalization

gem. RIAA +/- 0,2 dB

Subsonic Filter

20 Hz, 3rd order

3.6.4 FM Tuner Input Card

Frequency range

87,5 - 108,0 MHz

Tuning steps

50 kHz

Input impedance antenna

50 Ω

Sensitivity mono / stereo

1,5 μ V / 50 μ V

Signal-to-noise ratio mono /stereo

73 dB(A) / 68 dB(A)

THD mono /stereo

0,1 % / 0,3 %

Frequency response

30 Hz - 16 kHz

Channel separation

55 dB

3.6.5 Miscellaneous

Supply

115 V/60 Hz, / 230 V/50 Hz

Power consumption max.

70 W

Standby

<0,5 W

Dimensions (B x H x T)

430 x 130 x 390 mm

Weight

12 kg